

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/369,543 08/06/99 TEMPLE S 27754/35856

MMC2/0317

JAMES P ZELLER
MARSHALL O'TOOLE GERSTEIN MURRAY & BORUN
6300 SEARS TOWER
233 SOUTH WACKER DRIVE
CHICAGO IL 60606-6402

EXAMINER

NGUYEN, T

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED:

03/17/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/369,543	Applicant(s) Stephen Temple
	Examiner Thinh Nguyen	Group Art Unit 2861

Responsive to communication(s) filed on Aug 6, 1999.

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-40 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-40 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2861

DETAILED ACTION

Preliminary Amendment Received

1. Acknowledgment is made of the receipt of the Preliminary Amendments filed on August 6, 1999.

Applicant discloses and claims a continuation of an International Application No. PCT/GB98/00529, filed February 19, 1998 may not constitute a continuation. Should applicant desire to obtain the benefit of the filing date of the PCT application, attention is directed to 35 U.S.C. § 119 (a-d).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show swaths 21c, 21m, 21y, 21k (pages 6, 7), location A, B (page 6), pitch p, width w, swath pitch s as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Correction is required.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "means for controlling" (claim 2) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Art Unit: 2861

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "44" has been used to designate both "feeder" and "skip", reference character "14" has been used to designate both "copy" and "belt" (page 11). Correction is required.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "**means**" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2861

7. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: figure 36 (page 7), figure 8 (page 11).

8. The incorporation of essential material in the specification by reference to a foreign application (page 5, lines 10-11) or patent or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

Claim Objections

9. Claims 1, 17, and 27 are objected to because of the following informalities: the term "a clock" (claim 27, line 5) should have been "a block ". The phrase "each overprinting swath...it overprints." (claims 1, 17) should have been "wherein

Art Unit: 2861

each overprinting swath being of a different colour to the previously printed swath."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. Claim 2 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

the recitation of "so that the or" is unclear as written, and thus it can not be ascertained what limitation is being set forth.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

12. Claims 1-10, 12-34, 36-40 are rejected under 35 U.S.C. § 102(e) as being anticipated by Helinski et al. (U.S. 5,724,079)

Helinski et al. discloses the instant claimed recording apparatus, including (fig.5) orifices arrays being arranged in a pattern in which the orifices are spaced vertically and horizontally with respect to each other (col.3, lines 4-20). By way of the orifices arrangement and controlling of relative movement of the prior art's print head and ink-

Art Unit: 2861

receiving medium mechanism by a well-known microprocessor, the function of the instant claimed are inherently anticipated.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 11 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helinski et al. in view of Hawkins et al. (U.S. 5,710,582)

Helinski et al. discloses the instant claimed subject matters except for said printhead being greater than the receiving medium. However, it would be old and well known in the art of ink jet printers to use one or more full pagewidth array printbars to obtain a much higher print speed. As exemplified by Hawkins et al., a printbar is fixed in position adjacent to the path of the recording medium. Since there is no scan and re-scan time in these pagewidth printers, a much higher print speed (on the order of 10:1) is enabled. Moreover, printers using full width printheads (i.e., printbars) are known to offer several advantages over conventional printers in which a single printhead travels back and forth across the printing medium. The advantages of full width (or page width) printheads include faster printing speed, improved reliability, and quieter operation.

Art Unit: 2861

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pagewidth printhead in Helinski et al. thereby to enable a faster printing speed, reliability, and quieter operation.

Pertinent Prior art

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP Patent 55-142658 to Atsumi (abs, fig.3) discloses multiple arrays of colors print heads arranged in a scanning direction.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh Nguyen whose telephone number is (703) 308-7487.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Thinh Nguyen

March 13, 2000